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10/602,266	06/23/2003	Masao Moriguchi	SLA0770	1706

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EXAMINER

PADGETT, MARIANNE L

ART UNIT	PAPER NUMBER
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1792

MAIL DATE	DELIVERY MODE
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11/28/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/602,266

Applicant(s)

MORIGUCHI ET AL.

Examiner

Marianne L. Padgett

Art Unit

1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21, 23, 25-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21, 23 and 25-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 8/30/7.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

1. The applicant amendments deleting figure 4 & amendments to the paragraph on page 6 that described figure 4 have happened to discrepancies & confusion as discussed in the action mailed 6/29/2007. Should applicants' desire to replace figure 4 with an analogous illustration that can be supported by disclosure in the original specification, it will be considered.

Applicants' amendment to independent claim 1 have removed the new matter and contradictory language as discussed in section 2 of the action mailed 6/29/2007, however while considerably improved, appears to inadvertently insert a new matter problem as discussed below. Applicants' amendments have also corrected most of the 112, second problems as discussed in the previous action.

The amendments to the independent claim, which now present a clear sequence of events, may be considered to differentiate from Sposili et al. (6,577,380 B1) as a stand-alone reference, since while Sposili et al. have generalized teachings (SLS & post doping annealing (col. 5, lines 8-12 & 47-60; with respect to SLS, the ability to translate the substrate (and/or the mask) in a specific schedule of scanning and stepping precisely coordinated with laser pulses & the substrate stage being the translatable & rotatable (col. 9, lines 34-60)), which may encompass limitations teachings of the amended claims, Sposili et al. do not give details of translation schedules, saying that they are specific to particular processes & not elaborated on. With respect to the previously applied combination based on Sposili et al. (380) & Yamasaki (5,894,137), it is noted that while Yamasaki et al. has significant teachings concerning lateral crystallization & grain boundaries, etc. as discussed in previous actions, all their discussion concerns lateral crystallization where only one direction is specified, thus as the claims now require at least two steps where the direction of growth must be orthogonal, Yamasaki et al. (173) is insufficient to overcome the deficiencies of Sposili et al. (380) for the claims as now amended.

2. Claims 1-21, 23 & 25-44 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not

described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As cited by applicant, the language inserted into independent claim 1 does **almost** exactly match the language in the specification at page 6, lines 13-17, however there is an important discrepancy. The language in the specification recites "**the** previous step" (emphasis added), which actually has a significantly different meaning than "**a** previous step", since the use of the indefinite article "a" is essentially equivalent to saying -- any previous step --, such that the claimed process while inclusive of those consistent with the description on page 6, also includes a sequence such as a first step with lateral growth in a first direction, followed by multiple steps all having the same lateral growth rotated 90° from the first direction, however such a sequence does not appear to be supported by the original specification (nor probably intended by applicants, as they were probably considering antecedents when they used the article "a"), thus the amendment, however inadvertently, is inclusive of New Matter.

Considering the disclosure on page 6, and the clear meaning of "the previous step" therein, the examiner notes that language such as -- an immediately preceding step without any of the steps intervening -- would be considered to provide the same meaning as supported by the specification on page 6, as well as observing formal antecedent basis nomenclature. However, also due to the clear meaning in the specification of which the choice of article plays a part, the examiner would also find formally acceptable use of -- the previous step --, or -- the preceding step--, or the like, as both the plural steps & the individual ones, "each step", were previously introduced & as the need for clear supported meaning necessitates the use of the definite article.

It would also be appropriate to cite support in the specification for the annealing options as amended in claims 25, 28 & 35, as combined with the current commended process of claim 1, i.e. both be 2-shot laser process & the DS annealing process. The examiner notes with respect to these claims that the applicants merely said that they amended them as suggested by the office action, however that office

action only asked if this newly inserted claim language was applicants' intent based on their discussion in the 4/18/2007 remarks (that had no citations), not based on applicants' specification.

3. Claims 25-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The examiner has a question concerning the meaning of claim 25 with respect to the new claim language of independent claim 1 & dependent claim 2, which needs clarification in order to understand the scope of these claims. Given applicants' explanation of claim 25, and thus similar language in claims 28 & 35, on page 17 of their 4/18/2007 response, and their insertion of the language "wherein the first and second energy densities employed on the first area cause annealing of the first area" into these claims, can be considered to answer the previous question concerning applicant's intended meaning. However, as claim 1, as presently written, now requires each step to have two laser shots, where the number of steps is two or more, and claim 2 only refers to the use of the first laser in performing the steps, i.e. the shots, through the aperture patterns, is the third laser beam in claim 25 being employed for the second shot in each step & is it going through the first aperture pattern & the second aperture pattern of claim 2, such that the annealing in claim 25 is essentially the same thing as the forming of the polycrystalline structure of independent claim 1, or is the third laser beam independent from the first laser used for the 2 times N shots, possibly employed after completion of the shots, but to the entire first area, such that the 2N shots forms an initial polycrystalline silicon structure & subsequent treatment with the third laser beam provides added energy, with applicant calling the overall process annealing of the first area? Where would one find clarification in applicants' specification to clarify if either of these meanings, or what meaning is intended? Given applicants comments on the record & the claim language it is uncertain which option or what meaning is the exact intent, hence scope, however the examiner further notes that since similar claimed concept & claim language can be found in claim 28, except that a lamp is used

along with the first laser beam instead of a third laser beam, hence the lamp clearly cannot be part of the 2N laser shots, thus suggesting that a similar meaning was probably intended for claim 25.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-21, 23 & 25-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sposili et al. ((6,908,835 B2) or WO 02/086954 A1), and further in view of Yamazaki et al. (5,894,137), plus Fukunaga et al. (2004/0142543 A1) or Kawasaki et al. (6,653,657 B2) as discussed in sections 21-22 & 25 of the action mailed 9/19/2006.

This new reference (PN 6,908,835 B2 or WO 02/086954 A1) to Sposili et al., is applied in response to the amendments, the applicants are particularly directed to the abstract; and figures 13 (especially 13A) & 14, discussed on col. 5, lines 66-col. 6, line 11 & col. 24, where col. 24, lines 5-18 & 55-58 (in (835) with equivalent teachings in the parent PCT document) are particularly noted. As discussed in the abstract, Sposili et al. ((835) or WO)'s basic process employs two shots while using masks that define a plurality of beamlets for belt irradiating portions in the two successive shots to thus treat a contiguous area. A particular embodiment discussed with respect to figures 13 & 14, employs the basic process as discussed in the abstract to create SLS crystallization, then rotates the substrate 90° on the translation stage & performs the two shot process again, hence reading on applicants' 2N-shot laser irradiation process as now claimed. Note the figure 14 in Sposili et al. ((835) or WO), would appear to illustrate creation of single grains, inclusive of alternating crystal orientations, thus apparently inclusive of the direction of lateral growth being rotated 90° from the previous two shot step. As noted in col. 1, lines 5-14+, the techniques taught in Sposili et al. ((835) or WO) are intended to form large grain microstructure from amorphous semiconductor materials, where the grain-boundary-location is controlled, which are desirable to use in fabricating higher-quality devices, inclusive of transistor arrays (col. 1, lines 50-54). Sposili et al. ((835) or WO) is directed to this large grain crystallization process for the amorphous silicon/semiconductor films, and does not contain teachings directed towards particular parameters or significance subsequent processing to be employed in the creation of particular semiconductor device structures. However, the references of Yamazaki et al. (5,894,137), in view of Fukunaga et al. (2004/0142543 A1) or Kawasaki et al. (6,653,657 B2), which discuss relevant processing

of crystallized amorphous material, particularly with respect to grain structures & device formation, would have provided obvious subsequent processing techniques applicable to the initially recrystallize material for reasons as discussed in previous actions .

To reiterate previous discussion, Fukunaga et al (abstract; [0030]; [0087-89]; [0111]; [0128-130]; [0144]; [0156]; & claims), teach use of lasers, such as KrF excimer lasers, to crystallize amorphous silicon that has had a catalytic element, such as nickel deposit thereon, especially given further analogous teachings of performing further annealing treatments on the crystallized area to improve the crystallinity thereof, along with teachings of lateral growth ([0052-57]; [0059-67]; [0092]; [0114]; & [0131-133]), such that one of ordinary skill would have expected the taught laser crystallization using a catalytic element of Fukunaga et al. to have been effective for the crystallization step of Sposili et al. ((835) or WO), hence it would have been obvious to one of ordinary skill in the art to employ in this claimed process any energy source known to be effective for metal catalyzed crystallization of amorphous silicon to produce a polycrystalline silicon.

It was noted that the SLS process combines both the claimed laser irradiation and directional solidification annealing processes, where the areas may be the same, or the arbitrary designations of the claim may correspond to areas treated as described in Sposili et al. ((835) or WO). With respect to the aperture usage in claim 2, note that the 90° rotation will affect the claimed orientation for the second step, especially considering that the second aperture need not necessarily be different than the first aperture.

With respect to the parallel grain boundaries of claim 3 & the claims dependent therefrom, the SLS technique inherently creates grain boundaries at its edges, which as it scans or steps would create a plurality of essentially parallel grain boundaries on opposite sides of the crystallize grain, which for a controlled beam spot & controlled parameters would inherently be equally spaced. The choice of the width would depend on desired enduse combined with parameter control of the laser beam, and as such would have been expected to include widths as claimed, since they are typical dimensions desired for

electronic features in semiconductor devices like TFT's, such as are to be formed with the crystallize products of this reference. That Sposili et al. may use plural patterns in processing of the substrate would indicate that there may be different sets of such crystallized silicon film, with different or the same width, depending on the design requirements for the particular circuitry being created. Alternately, for mass patterns that are square or worked rectangular as shown in the mask 8 of figure 5, each pulse would give two sets of orthogonal parallel grain boundaries, where patterns with multiple apertures, exemplified by the set of 4 rectangles would provide a plurality of such parallel grain boundaries, where squares would have first and second widths equal, while rectangles widths are unequal.

It remains further noted that the sequential lateral solidification employed by Sposili et al. (((835) or WO) which for this purpose is analogous to the previously applied (380)) effectively removes or pushes to the end one side of the grain boundaries and ridges associated therewith, while extending the length of the grain boundaries in the direction of stepping our motion, which would appear to be the types of actions being referred to in claims 12, 13 and like. Note that the transistor arrays discussed by Sposili et al. ((835) or WO) as desirable and uses are old and well-known to require doping, typically via ion in plantation, which requires subsequent annealing, thus it would've been obvious toward of ordinary skill in the art to employ typical processing techniques for creating such devices in conjunction with the specific crystallization procedure of Sposili et al. ((835) or WO).

Alternately to Fukunaga et al., Kawasaki et al. (657) teaches crystallization of amorphous silicon to form polycrystalline with lateral growth, where the crystallization procedure may use heat or laser (single or dual lasers, excimer with single or plural pulses), and may be performed with or without a catalytic element (abstract; col. 1, line 28-col. 2, line 6; col. 3, lines 14-32 & 56-68+; col. 6, line 20-col. 7, lines 68+), hence providing a further showing of the obviousness of using laser crystallization as the energy source for the initial crystallization process of these claims.

As previously noted the claims has written include first area = second area or significantly overlap there with, where Fukunaga et al. may have a further radiation treatment to enhance the crystallization that may use a strong light such as an infrared lamp or may use a second laser irradiation procedure, where this annealing step after the initial crystallization step is also said to proceed or is on to lead in its crystal growth ([0099], [0114] & [0131-132]), which would read on the alternative option of the laser irradiation process being different from the directional solidification annealing process, but where first area still equals second area.

Yamasaki et al. (137) teach a crystallization process of amorphous silicon, which has been coated with a silicon oxide film having an aperture that exposes region 405 on to which a catalytic element, such as nickel is introduced, and thereafter heating is performed to cause crystallization, where lateral growth occurs, however grain boundaries that occur between adjacent crystals that are perpendicular to the direction of crystal flow in the base region, i.e. channel result in potential barriers and hinder the flow of current. Therefore to improve the crystallization in these areas and create "monodomain regions" that are substantially single crystal with no grain boundaries in the crystalline silicon, it is further taught to improve the crystallization via application of laser beam such as excimer lasers (KrF at 248 nm or XeCl at 308 nm) or rapid thermal annealing using strong light from IR or UV lamps. This annealing of the lateral growth region is locally heating high temperatures such that the metal silicide from the catalytic element is precedently melted, eliminating grain boundaries, In re solidifying to form essentially a single crystal domain in such a way that can be considered to remain lateral or directional. See the abstract; figures; col. 4, line 5-col. 5, line 14 (influence of grain boundaries in TFT); col. 6, lines 39-55; col. 7-8, especially col. 7, lines 10-15, 35-44 & col. a, lines 20-35; col. 9, lines 41-65; col. 11-line 6-55; col. 12, lines 5-42; col. 13, lines 1-60 & 66-col. 14, line 5.

Yamasaki et al. (137) differs from the present claim by initially turning the amorphous crystal into polycrystalline via a thermal process, however as has been seen above with respect to Fukunaga et al.

or Kawasaki et al. (sections 15 or 21) it was known to provide equivalent lateral growth crystallization processes using catalytic elements employing either her thermal or laser processes, hence as discussed above it would've been obvious to one of ordinary skill in the art to employ the alternate technique of laser treatment, instead of the purely thermal treatment to induce the crystallization formation.

It is noted that Yamazaki uses apertures in his process, and it would've been obvious to one of ordinary skill to use multiple apertures in a process to produce multiple polycrystalline regions forming multiple TFT structures, since designs for circuitry require multiples of such functional structures.

While Sposili et al. does not specifically discuss using in selecting a third aperture patterns on a second top area it relates to a portion of the second area etc., as noted above they do suggest using their process not just for the initial crystallization, but also for successive annealing processes, which as can be seen in the above discussed processes of Yamasaki et al. (137), Fukunaga et al. or Kawasaki et al., that the crystallization of amorphous silicon & formation devices such as TFT constructions, Main compass multiple annealing steps, that may employ multiple laser usages, or may employ strong light from lamps in a similar fashion, where the area that was initially crystallized, is again partially or wholly annealed again, possibly both before implanting for TFT formation, and thereafter. Therefore given Sposili et al.'s suggestion for advantageous end uses, it would have been obvious to one of ordinary skill in the art to employ such sequential annealing processes as taught in Sposili et al. for any of the laser annealing techniques as presented in the above combination of Yamazaki et al. plus Fukunaga et al. or Kawasaki et al., further noting that the previously discussed embodiments exemplified in these references, where they are forming TFT devices further teach laser annealing after doping, consistent with Sposili et al.'s suggestion of further usage.

With respect to the various claimed combinations of parameters, such as energy density, wavelength, etc., previously noted lamps and lasers employed in the secondary and tertiary references supply various claimed wavelength and pulse duration, etc., parameters for use in their process, as well as

all references recognizing the importance of energy or light intensity or energy density impinged on the surface being treated, in order to control the effects of that light in the various crystallization, recrystallization & annealing processes, hence it would've been obvious to one of ordinary skill in the art to employ such teachings in optimizing the success of sequential processes as suggested by this combination, in order to produce desired and reproducible results.

6. Other art of interest include Maekawa et al. (7,153,359 B2), who teaches SLS & whose figures 5 & 34 (also see col. 18) appear to show crystallization in perpendicular orientations, thus appears to have teachings concerning the claimed orientation of lateral growth. Yamasaki et al. (6,764,886 B2), as illustrated in figures 3(a-b) also has sections with perpendicular orientation, however grain boundaries as illustrated in figure 11 are not perpendicular. The patent to Jiroku et al. (6,602,765 B2) has teachings of interest concerning combination of two crystallization processes to effectively remove defects in the initial crystallization technique (col. 11-12), which is relevant & cumulative to the above rejection.

With respect to a reference by Crowder et al. "Sequential Lateral Solidification..." submitted in the IDS of 8/30/2007, is noted that it provides teachings analogous to that of Sposili et al. ((835) or WO), however the only date available therefore is the entire year 2003, hence it is not known whether or not this reference is prior art, however if it is prior art it may be considered equivalent to Sposili et al. ((835) or WO) for the purposes of the above rejection.

7. Claims 1-21, 23 & 25-44 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6,921,434 B2 (Voutsas) in view of Sposili et al. (((835) or WO) or WO02/086954 A1), and further in view of Yamazaki et al. (5,894,137), plus Fukunaga et al. (2004/0142543 A1) or Kawasaki et al. (6,653,657 B2) as discussed above. The claims of Voutsas (434) are describing essentially a 2 shot laser crystallization process, essentially equivalent to that described in Sposili et al. (((835) or WO) or WO) & the claims, except lacking a second set of steps performed in orthogonal orientation/lateral solidification direction, however

as 1-21, 23 & 25-44 are provides teaching both with and without the perpendicular second set of laser shots, it would've been obvious to one of ordinary skill in the art to apply the 90° rotation teaching to the process of the patent claims as they would have analogously been expected to be affected & avid cages the same as in Sposili et al. ((835) or WO). The further processing steps would have been obvious in view of the secondary & tertiary references for reasons as discussed above & previously.

8. Applicant's arguments filed 8/30/2007 & discussed above have been fully considered but they are not persuasive.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marianne L. Padgett whose telephone number is (571) 272-1425. The examiner can normally be reached on M-F from about 8:30 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks, can be reached at (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.


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MLP/dictation software

11/(13 & 26)/2007



MARIANNE PADGETT
PRIMARY EXAMINER